WO 2004/013023

Patent claims

A method for transferring a feed strip of a 1. material web, in particular a paper or board web, 5 а winding device (18) for winding material web onto a spool (20), in which the material web or the feed strip is led over a carrier drum (22) and a winding nip (24) is formed between the carrier drum (22) and the spool (20), 10 characterized in that the line force (LK) in the winding nip (24) is set to a higher value in the region of the feed strip than in the remaining region of the winding nip (24) during the transfer of the feed strip.

15

20

- 2. The method as claimed in claim 1, characterized in that the feed strip is led through the winding nip (24) in one of the two lateral edge regions, and in that the line force (LK) is set to a higher value in the relevant lateral edge region of the winding nip (24) than in the other lateral edge region.
- 3. The method as claimed in claim 2, characterized in that the line force (LK) in the other lateral edge region is set to the value zero.
- 4. The method as claimed in claim 2 or 3, characterized in that the line force (LK) on the operator side and on the drive side of the winding nip (24) is set to differently high values, being set to the higher value on the side of the feed strip.
- 35 5. The method as claimed in one of the preceding claims, characterized in that the line force (LK) in the winding nip (24) is set via a movable or displaceable spool (20).

- 6. The method as claimed in claim 5, characterized in that the spool (20) is pressed more firmly against the carrier drum (22) in the region of the feed strip than in the remaining region of the winding nip (24).
- 7. The method as claimed in claim 5 or 6, characterized in that the spool (20) is set obliquely with respect to the carrier drum (22).

10

5

.. . :

- 8. The method as claimed in one of claims 5 to 7, characterized in that a stationary carrier drum (22) is used.
- 15 9. The method as claimed in one of claims 5 to 8, characterized in that the feed strip is fed in the primary region of the winding device (18).
- 10. The method as claimed in one of claims 5 to 8, characterized in that the feed strip is fed in the secondary region of the winding device (18).
- 11. The method as claimed in one of claims 1 to 4, characterized in that the line force (LK) in the winding nip (24) is set via a movable or displaceable carrier drum (22).
- 12. The method as claimed in claim 11, characterized in that the carrier drum (22) is pressed more firmly against the spool (20) in the region of the feed strip than in the remaining region of the winding nip (24).
- 13. The method as claimed in claim 11 or 12, characterized in that the carrier drum (22) is set obliquely with respect to the spool (20).

WO 2004/013023 PCT/EP2003/050306

14. The method as claimed in one of claims 11 to 13, characterized in that the spool (20) is stationary or movable in order to compensate for the increase in the winding diameter.

5

30

.. :

- 15. The method as claimed in one of claims 11 to 14, characterized in that the feed strip is fed in the primary region of the winding device (18).
- 10 16. The method as claimed in one of claims 11 to 14, characterized in that the feed strip is fed in the secondary region of the winding device (18).
- 17. A winding apparatus (18) for winding a material web, in particular a paper or board web, onto a spool (20), in which the material web is led over a carrier drum (22) and a winding nip (24) is formed between the carrier drum (22) and the spool (20), in particular for carrying out the method as
- claimed in one of the preceding claims, characterized in that, in order to transfer a feed strip of the material web, the line force (LK) in the winding nip (24) can be set to a higher value in the region of the feed strip than in the remaining region of the winding nip (24).
 - 18. winding device as claimed The in claim 17, characterized in that the feed strip through the winding nip (24) in one of the two lateral edge regions, and in that the line force (LK) is set to a higher value in the relevant lateral edge region of the winding nip (24) than in the other lateral edge region.
- 35 19. The winding device as claimed in claim 18, characterized in that the line force (LK) in the other lateral edge region is set to the value zero.

5

- 20. The winding device as claimed in claim 18 or 19, characterized in that the line force (LK) on the operator side and on the drive side of the winding nip (24) can be set to differently high values, being able to be set to the higher value on the side of the feed strip.
- 21. The winding device as claimed in one of the preceding claims, characterized in that the line force (LK) in the winding nip can be set via a movable or displaceable spool (20).
- 22. The winding device as claimed in claim 21, characterized in that the spool (20) can be pressed more firmly against the carrier drum (22) in the region of the feed strip than in the remaining region of the winding nip (24).
- 20 23. The winding device as claimed in claim 21 or 22, characterized in that the spool (20) can be set obliquely with respect to the carrier drum (22).
- 24. The winding device as claimed in one of claims 21 to 23, characterized in that the carrier drum (22) is stationary.
- 25. The winding device as claimed in one of claims 21 to 24, characterized in that the feed strip can be fed in the primary winding region of the winding device (18).
- 26. The winding device as claimed in one of claims 21 to 24, characterized in that the feed strip can be fed in the secondary winding region of the winding device (18).

WO 2004/013023 PCT/EP2003/050306

16

- 27. The winding device as claimed in one of claims 17 to 20, characterized in that the carrier drum (22) is movable or displaceable and the line force in the winding nip (24) can be set via the carrier drum (22).
- 28. The winding device as claimed in claim 27, characterized in that the carrier drum (22) can be pressed more firmly against the spool (20) in the region of the feed strip than in the remaining region of the winding nip (24).

5

20

25

- 29. The winding device as claimed in claim 27 or 28, characterized in that the carrier drum (22) can be set obliquely with respect to the spool (20).
 - 30. The winding device as claimed in one of claims 27 to 29, characterized in that the spool (20) is stationary or movable in order to compensate for the increase in the winding diameter.
 - 31. The winding device as claimed in one of claims 27 to 30, characterized in the feed strip can be fed in the primary region of the winding device (18).

32. The winding device as claimed in one of claims 27 to 30, characterized in the feed strip can be fed in the secondary region of the winding device (18).